

## **Constraint Analysis of Watershed Farmers and Officials on Natural Resource Management in Watershed Areas of Andhra Pradesh State**

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### **ABSTRACT**

*The paper describes the constraints and suggestions elicited by the watershed farmers on NRM and these constraints were grouped under six categories namely watershed related psychological, situational, technical, socio-economic and financial constraints. The constraints and suggestions under each category were ranked based on frequency and percentage. The paper also describes the constraints and suggestions elicited by the watershed officials on NRM and these constraints and suggestions were grouped under six categories namely watershed related, organizational, technical, financial, job related and extension constraints. The constraints under each category were ranked based on frequency and percentage.*

**Key words :** NRM, Watershed farmers, Constraints and Suggestions

The nature and status of natural resources play a pivotal role for sustainable yields in various crops. The potentiality of these resources especially like soil and water is decreasing in alarming proportions, thereby effecting farming situation as well as crop production both at micro and macro level. The isolated approach of natural resource management does not yield expected results whereas community based management derives maximum benefits to the farmers in terms of soil, water and moisture conservation for sustainable use of these resources for better crop production. There is every need to gauge the degree of Natural Resource Management behaviour of the farmers for their sustainable use. Keeping this in view the present investigation entitled as “Constraint analysis of watershed farmers and officials on Natural Resource Management in watershed areas of Andhra Pradesh state”

### **METHODOLOGY**

The state of Andhra Pradesh and the three regions i.e. Telangana, Coastal Andhra and Rayalaseema and from each region one district i.e. Mahaboobnagar from Telangana, Prakasham from Coastal Andhra and Anathapur from Rayalaseema were selected purposively. From each district two IWMPs, from each IWMP area one mandal, from each mandal four villages and from each village ten watershed farmers were selected randomly, thus a total of six (6) IWMPs, six (6) mandals, twenty four (24) villages and two hundred and forty (240) farmers were considered as sample for the study. From each district, ten members of officials were selected randomly, thus comprising 30 officials for the study. The official as a

respondent for the study is operationally defined as the officer who is directly involved in planning, implementing and monitoring the NRM activities under IWMP. The officers were selected to elicit the constraints and suggestions on implementation of NRM activities.

### **RESULTS AND CONCLUSIONS**

**Constraints and suggestions elicited by the watershed farmers on NRM**

**Constraints elicited by the watershed farmers on NRM**

The Table 1 illustrated the constraints elicited by the watershed farmers on NRM and these constraints were grouped under six categories namely watershed related, psychological, situational, technical, socio-economic and financial constraints. The constraints under each category were ranked based on frequency and percentage

It is pointed out from the Table 1 that the major constraints elicited by the watershed farmers under watershed related category were lack of regulatory arrangement on NRM activities under watershed (67.91%) and lack of maintenance of NRM activities in watershed (58.33%). The constraints like lack of team spirit among the watershed user groups (71.66%) and poor participation in group discourses (62.50%) were covered under psychological category; whereas small and marginal land holdings (80.83%) and political interference in watershed management (62.50%). Under situational category; poor technical support to the farmers to take up NRM activities under watershed (51.66%), poor technical knowledge of watershed farmers on NRM activities and skills followed in NRM were obsolete and traditional

(39.16%) under technical constraints; Whereas, lack of financial and legal powers to the watershed committee (52.91%) and more cost was involved in establishing the irrigation structures (42.91%) under socio-economic category; local bodies were not empowered to use the budget allotted for NRM activities under watershed (31.66%), and no transparency in allocation of budget for various NRM activities under watershed (31.66%) under financial constraints category.

**Table 1**  
**Constraints elicited by the watershed farmers on NRM**

(n=240)

| S. No                                  | Constraints   | F   | %     | Rank |
|--|---|-----|-------|------|
| <b>I Watershed related constraints</b> |   |     |       |      |
| 1                                      | Lack of regulatory arrangement on NRM activities under watershed                                | 163 | 67.91 | I    |
| 2                                      | Lack of maintenance of NRM activities in watershed  | 140 | 58.33 | II   |
| 3                                      | Lack of linking mechanism among the nearby watershed areas                                      | 67  | 27.91 | VI   |
| 4                                      | Too many activities under watershed   | 80  | 33.33 | III  |
| 5                                      | NRM activities were taken up for community benefit than benefiting the individual members       | 70  | 28.33 | V    |
| 6                                      | Top down approach is followed in designing and implementing the watershed activities            | 75  | 31.25 | IV   |
| <b>II Psychological constraints</b>    |   |     |       |      |
| 1                                      | Lack of team spirit among the watershed user groups   | 172 | 71.66 | I    |
| 2                                      | Poor participation in group discourses  | 150 | 62.50 | II   |
| 3                                      | More conflicts and rivalry among the watershed user group members                               | 135 | 56.25 | II   |
| 4                                      | Weak group disintegration   | 90  | 37.50 | VI   |
| 5                                      | Lack of focused group approach in watershed management  | 120 | 50.00 | IV   |
| 6                                      | Poor integration between watershed users and officials  | 60  | 25.00 | IX   |
| 7                                      | Lack of regular meetings by the watershed user groups   | 80  | 33.33 | VII  |
| 8                                      | No concrete output from the deliberations of meetings   | 70  | 29.16 | VIII |
| 9                                      | Lack of public-private partnership mechanism in watershed management                            | 120 | 50.00 | I    |
| 10                                     | Not following stipulated guidelines in programme formulation and implementation                 | 43  | 17.91 | XI   |
| 11                                     | Lack of knowledge on record keeping to document the NRM activities                              | 100 | 41.66 |      |
| 12                                     | Poor knowledge on finance management by the members in groups                                   | 60  | 25.00 | IX   |
| 13                                     | Women participation in NRM activities is poor   | 100 | 41.66 | V    |
| 14                                     | Lack of trust on watershed committee  | 50  | 20.83 | X    |
| 15                                     | No cross sectional learning among the farmers about the usage of NRM activities under watershed | 150 | 62.50 | I    |
| <b>III Situational constraints</b>     |   |     |       |      |
| 1                                      | Small and marginal land holdings  | 194 | 80.83 | I    |
| 2                                      | Too many groups   | 116 | 48.33 | IV   |
| 3                                      | Lack of sensitivity among officials towards watershed management                                | 70  | 29.16 | VI   |
| 4                                      | Political interference in watershed management  | 150 | 62.50 | II   |
| 5                                      | Lack of adequate support from PRI   | 130 | 54.16 | III  |
| 6                                      | Poor follow-up action by the officials  | 97  | 40.41 | V    |
| 7                                      | No innovative practices were introduced   | 97  | 40.41 | V    |
| 8                                      | Lack of enough extension activities to promote NRM activities in a bigger way                   | 150 | 62.50 | I    |
| <b>IV Technical constraints</b>        |   |     |       |      |
| 1                                      | Poor technical support to the farmers to take up NRM activities under watershed                 | 124 | 51.66 |      |
| 2                                      | Poor technical knowledge of watershed farmers on NRM activities                                 | 94  | 39.16 | II   |
| 3                                      | The skills followed on NRM are obsolete and traditional   | 94  | 39.16 | II   |

|           |  |     |       |     |
|-----------|--|-----|-------|-----|
| 4         | Lack of coordination among various concerned departments in taking up NRM activities         | 38  | 15.83 | III |
| <b>V</b>  | <b>Socio-economic constraints</b>  |     |       |     |
| 1         | Lack of enough social organizations in the villages  | 45  | 18.75 | V   |
| 2         | Low income levels  | 90  | 37.50 | III |
| 3         | Poor social and economic framework in the village  | 70  | 29.16 | IV  |
| 4         | More cost is involved in establishing the irrigation structures                              | 103 | 42.91 | II  |
| 5         | Lack of financial and legal powers to the watershed committee                                | 127 | 52.91 | I   |
| <b>VI</b> | <b>Financial constraints</b>   |     |       |     |
| 1         | No transparency in allocation of budget for various NRM activities under watershed           | 76  | 31.66 | I   |
| 2         | Local bodies are not empowered to use the budget allotted for NRM activities under watershed | 69  | 28.75 | II  |
| 3         | Miss utilization of allotted funds   | 52  | 21.66 | II  |

*F-Frequency, % - Percentages*

**Suggestions expressed by the watershed farmers on NRM** The Table 2 envisages the suggestions expressed by the watershed farmers on NRM. As seen in Table 2 the suggestions were grouped into six categories namely watershed related psychological, situational, technical, socio-economic and financial suggestions. The suggestions under each category were ranked based on frequency and percentage.

The major suggestions expressed by the watershed farmers with regard to the watershed related category are regulatory mechanism should be created comprising both officials and watershed user group members to act as an advisory body at various levels

of implementation of NRM activities under watershed (66.66%) and database has to be created in terms of progress on implementation of various NRM activities for effective maintenance of watershed area (57.08%). In case of psychological category the suggestions offered are efforts must be made to inculcate a spirit of team work among the farmers to attend various NRM activities (70.83%) and farmers should be told the importance of attending and participating in various group discussions and interface meetings to unearth the problems and to finalize the NRM activities to be taken up (61.25%). Under situational category, the suggestions offered are - political interference should

**Table 2**  
**Suggestions expressed by the watershed farmers on NRM**

(n=240)

| S.NO      | Suggestions   | F   | %     | Rank |
|-----------|---|-----|-------|------|
| <b>I</b>  | <b>Watershed related suggestions</b>  |     |       |      |
| 1         | A regulatory mechanism should be created comprising both officials and watershed user group members to act as an advisory body at various levels for implementation of NRM activities under watershed | 160 | 66.66 | I    |
| 2         | A database has to be created in terms of progress on implementation of various NRM activities for effective maintenance of watershed area   | 137 | 57.08 | II   |
| 3         | Much attention should be made by the government in strengthening the NRM system by pooling up financial and non financial resources on community mode   | 100 | 41.66 | III  |
| 4         | All the activities under each watershed area should be consolidated into few categories in order not to diffuse the efforts on unnecessary activities   | 85  | 35.41 | IV   |
| <b>II</b> | <b>Psychological suggestions</b>  |     |       |      |
| 1         | Efforts must be made to inculcate the spirit of team work among the farmers to attend various NRM activities  | 170 | 70.83 | I    |
| 2         | Frequently the farmers of nearby watershed area should be brought together to exchange the successful intervention of NRM activities in their own watershed area                                      | 145 | 60.41 | III  |

|                                    |   |     |       |     |
|------------------------------------|---|-----|-------|-----|
| 3                                  | Farmers should be told the importance of attending and participation in various group discussions and interface meetings to unearth the problems and to finalize the NRM activities to be taken up  | 147 | 61.25 | II  |
| 4                                  | The women folk should be sensitized to participate in various NRM activities  | 100 | 41.66 | IV  |
| <b>III Situational suggestions</b> |   |     |       |     |
| 1                                  | Farmers should be motivated to take up NRM activities on a community mode in a large area to derive more benefits from implementation of NRM activities   | 48  | 20.00 | V   |
| 2                                  | The officials should take up more follow up actions after completion of the implementation of NRM activities  | 97  | 40.41 | IV  |
| 3                                  | The local bodies especially GPs should support morally, ethically and financially to take up various NRM activities under watershed area.   | 130 | 54.16 | II  |
| 4                                  | The political interference should be minimized as much as possible to percolate the benefits through implement of NRM activities to the needy people  | 150 | 62.50 | I   |
| 5                                  | The groups with overlapping interests should be merged to bring down the no. of groups to work effectively for the cause of NRM   | 116 | 48.33 | III |
| 6                                  | More extension activities like training programme interface meetings/ group discussions/exposure visits, networking of innovate farmers should be organized to disseminate latest information on NRM activities to the farmers                        | 150 | 62.50 | I   |
| <b>IV Technical suggestions</b>    |   |     |       |     |
| 1                                  | Much emphasis should be given to improve the knowledge and skills of the farmers on importance/ relevancy /utilization of various NRM activities under watershed area by conducting different kinds of knowledge and skill based training programmes. | 90  | 37.50 | II  |

be minimized as much as possible to percolate the benefits through implement of NRM activities to the needy people (62.50%), more extension activities like training programmes interface meetings, group discussions, exposure visits, network among the innovative farmers should be established to disseminate latest information on NRM activities to the farmers (62.50%) and the local bodies especially gram panchayats should support morally, ethically and financially to take up various NRM activities under watershed area (54.16%). With regard to technical category the suggestions given are, more no. of institutions should be brought under the umbrella of NRM to provide much needed technical support to attend various NRM activities by the farmers (39.16%) and much emphasis should be given to improve the knowledge and skills of the farmers on importance/ relevancy /utility of various NRM activities under watershed area by conducting different kinds of knowledge and skill based training programmes (37.50%). Under socio-economic category, the suggestions explained are the watershed committees working in different watersheds should be entrusted with financial and legal powers to take NRM activities (52.91%) and low cost water harvesting structures should be designed and advised to the farmers

(42.91%). The suggestions offered under financial category are the members of the watershed user group should be taken into confidence while distributing budget to various NRM activities (31.66%) and the local bodies should be financially empowered to take up some of the location specific and need based and customized NRM activities (30.83%).

#### **Constraints and suggestions elicited by the watershed officials on NRM**

**Constraints elicited by the watershed officials on NRM :** The Table 3 illustrated the constraints elicited by the watershed officials on NRM and these constraints were grouped under six categories namely watershed related, organizational, technical, financial, job related and extension constraints. The constraints under each category were ranked based on frequency and percentage.

It is pointed out from the Table 3 that the major constraints elicited by the watershed officials were poor cooperation from local bodies (60.00%) and lack of participation in deciding the contribution of resources like land, labour and money (50.00%) under watershed related category; insufficient man power for carrying out the NRM activities (80.00%) and excessive political interference in implementation of

NRM activities under watershed area (66.66%). Under organizational category; more emphasis is given for establishing water harvest structures rather than taking up other NRM activities under watershed area (56.61%) and often approval of design is delayed for constructing various irrigation structures in watershed area (50.00%). Under technical category; untimely release of funds to take up NRM activities (60.00%) and no financial power to the project officers are not given to take up NRM activities (50.00%). Under financial category. Heavy workload in terms of project

designing and implementation (76.66%) and less scope to upgrade the technical knowledge on implementing NRM activities (66.66%). Under job related category; poor knowledge on various tools and techniques to disseminate the information on NRM activities (73.33%) and lack of skills on assessing the need of the farmers to organize various training programmes (63.33%) And no knowledge on procedure of conducting follow-up action on NRM activities under watershed area (63.33%) under extension constraints category.

**Table 3**  
**Constraints elicited by the watershed officials on NRM**

(n=30)

| S.NO       | Constraints  | F  | %     | Rank |
|------------|--|----|-------|------|
| <b>I</b>   | <b>Watershed related constraints</b>   |    |       |      |
| 1          | Poor cooperation from local bodies   | 18 | 60.00 | I    |
| 2          | Poor cooperation for the officials from water user associations  | 8  | 26.66 | V    |
| 3          | Lack of participation of farmers in deciding the location and design of proposed soil and water conservation structures              | 7  | 23.33 | VI   |
| 4          | Lack of participation in deciding the contribution of resources like land, labour and money  | 15 | 50.00 | II   |
| 5          | Lack of enthusiasm among the watershed user groups to share the responsibility in NRM activities                                     | 13 | 43.33 | III  |
| 6          | No sharing mechanism between officials and farmers with regard to the benefits received through NRM activities under watershed areas | 10 | 33.33 | IV   |
| 7          | Low attendance of farmers during the meetings organised to review the progress of work   | 8  | 26.66 | V    |
| 8          | Occurrence of climatic adversaries to implement the NRM activities   | 6  | 20.00 | VII  |
| <b>II</b>  | <b>Organizational constraints</b>  |    |       |      |
| 1          | More etiquette and redtapism   | 7  | 23.33 | IX   |
| 2          | Lack of guidelines in project formulation and implementation   | 5  | 16.66 | X    |
| 3          | Excessive political interference in implementation of NRM activities under watershed area  | 20 | 66.66 | II   |
| 4          | Insufficient man power for carrying out the NRM activities   | 24 | 80.00 | I    |
| 5          | Lack of coordination between the officials of various departments  | 11 | 36.66 | V    |
| 6          | Poor cooperation and timely support from higher authorities  | 10 | 33.33 | VI   |
| 7          | Unable to take up works in time due to delayed administrative approval   | 13 | 43.33 | IV   |
| 8          | Incapability of the watershed committee members to perform their duties  | 9  | 30.00 | VII  |
| 9          | Lack of sufficient engineer staff  | 8  | 26.64 | VIII |
| 10         | Lack of infrastructure to organize meetings and training programmes  | 20 | 66.66 | II   |
| 11         | Poor knowledge on giving publicity about the assets generated through NRM activities under watershed area                            | 17 | 56.66 | III  |
| 12         | No legality of fixing the responsibility among the user groups to implement the NRM activities under watershed                       | 9  | 30.00 | VII  |
| <b>III</b> | <b>Technical constraints</b>   |    |       |      |
| 1          | More emphasis is given for establishing water harvest structures rather than taking up other NRM activities under watershed area     | 17 | 56.61 | I    |
| 2          | More time is consumed to implement the NRM activities through participatory mode   | 7  | 23.33 | V    |

|           |  |    |       |     |
|-----------|--|----|-------|-----|
| 3         | Poor skills on designing, constructing and operating the irrigation structures in watershed area   | 13 | 43.33 | III |
| 4         | Often approval of design is delayed for constructing various irrigation structures in watershed area.  | 15 | 50.00 | II  |
| 5         | Lack of skills to motivate the farmers to take up various NRM activities in watershed area   | 10 | 33.33 | IV  |
| 6         | Poor technical competency to initiate innovative NRM activities under watershed area   | 13 | 43.33 | III |
| <b>IV</b> | <b>Financial constraints</b>   |    |       |     |
| 1         | No incentives for extra efforts of the officers  | 10 | 33.33 | III |
| 2         | Untimely release of funds to take up NRM activities  | 18 | 60.00 | I   |
| 3         | No knowledge on financial management   | 10 | 33.33 | III |
| 4         | No financial power to the project officers to take up NRM activities   | 15 | 50.00 | II  |
| 5         | Less transparency in showing the details of allotted budget to the watershed user group members about the NRM activities to be taken up under watershed area | 3  | 10.00 | IV  |
| <b>V</b>  | <b>Job related constraints</b>   |    |       |     |
| 1         | Less scope to upgrade the technical knowledge on implementing NRM activities   | 20 | 66.66 | II  |
| 2         | Heavy work load in terms of project designing and implementation   | 23 | 76.66 | I   |
| 3         | Poor efficiency of officials due to mismanagement by the top administration  | 7  | 23.33 | VI  |
| 4         | Poor communication mechanism among the officials   | 15 | 50.00 | IV  |
| 5         | Poor skills on programme development and assessment  | 18 | 60.00 | III |
| 6         | More time is consumed on monitoring and evaluating the NRM activities  | 10 | 33.33 | V   |
| 7         | More vested interests among the watershed user group members   | 18 | 60.00 | III |
| <b>VI</b> | <b>Extension constraints</b>   |    |       |     |
| 1         | Poor knowledge on various tools and techniques to disseminate the information on NRM activities  | 22 | 73.33 | I   |
| 2         | Poor skills on planning and preparation of agriculture information material (leaflets, folders, pamphlets)   | 15 | 50.00 | III |
| 3         | Poor skills on conducting field trials, demonstrations, focused group discussions etc for the farmers  | 8  | 26.66 | IV  |
| 4         | Lack of skills on assessing the needs of the farmers to organize various training programmes   | 19 | 63.33 | II  |
| 5         | No knowledge on procedure of taking up follow-up action on NRM activities conducted under watershed area   | 19 | 63.33 | II  |

**Suggestions expressed by the watershed officials on NRM :** The Table 4 envisaged the suggestions expressed by the watershed officials on NRM. As seen in the Table 4 the suggestions were grouped into six categories namely watershed related, organizational, technical, financial, job related and extension constraints. The suggestions under each category were ranked based on frequency and percentage.

The major suggestions expressed by the watershed officials with regard to watershed related category were more cooperation is sought from the grass root level PRIs like grampanchayats morally and ethically, contributing both financial and non financial resources (60.00%) and as NRM is considered as a group activity the presence of more no. of farmers in appraising the progress of work will generate more desired results (43.33%). Under organizational

category the suggestions offered are all the vacant posts should be filled up to create a large pool of manpower for carrying out the NRM activities (80.00%) and the political interference should be minimized to take up NRM activities with more transparency and impartiality (66.66%). In case of technical category the suggestions given were equal importance should be given to all the activities under NRM deviating the customary of giving more weightage to water harvesting structures (56.66%) and more refresher training programmes should be organized on new initiates of NRM activities to improve technical competency of the officials (43.33%). The major financial suggestions are the financial power should be decentralized to delegate financial powers partly to the project officers to have leverage in implementing innovative NRM initiatives (66.66%) and the allotted funds should be released in time to facilitate to

**Table 4**  
**Suggestions expressed by the watershed officials on NRM**

(n=30)

| S. NO      | Suggestions   | F  | %     | Rank |
|------------|---|----|-------|------|
| <b>I</b>   | <b>Watershed related suggestions</b>  |    |       |      |
| 1          | More cooperation is sought from the grass root level PRIs like grampanchayats morally and ethically and contributing both financial and non financial resources   | 18 | 60.00 | I    |
| 2          | Much participation is invited from the farmers in deciding the contribution of both financial and non financial resources like land, labour, money and also deciding the design and place of taking up NRM activities | 7  | 23.33 | IV   |
| 3          | As NRM is considered as a group activity the presence of more no. of farmers in appraising the progress of work will generate more desired results  | 13 | 43.33 | II   |
| 4          | A mechanism has to be evolved the accrued benefits through the implementation of NRM activities   | 10 | 33.33 | III  |
| <b>II</b>  | <b>Organizational suggestions</b>   |    |       |      |
| 1          | All the vacant posts should be filled up to create a large pool of manpower for carrying out the NRM activities   | 24 | 80.00 | I    |
| 2          | The political interference should be minimized to take up NRM activities with more transparency and impartiality  | 20 | 66.66 | II   |
| 3          | The officials should be trained to get the knowledge on giving wide publicity in different forms on assets generated through NRM activities   | 17 | 56.66 | III  |
| 4          | The electronic gadgets like small phones, computers with broadband connectivity, toll free number etc. should be provided to the officials to strengthen the facility for disseminating information                   | 15 | 50.00 | IV   |
| 5          | Immediate administration approval should be given to hasten up the implementation of NRM activities   | 13 | 43.33 | V    |
| 6          | More no. of engineering staff should be provided in irrigation department to take up various water harvesting structures under watershed  | 8  | 26.66 | VI   |
| <b>III</b> | <b>Technical suggestions</b>  |    |       |      |
| 1          | Equal importance should be given to all the activities under NRM deviating the customary of giving more weightage to water harvesting structures  | 17 | 56.66 | I    |
| 2          | More refresher training programmes should be organized on new initiates of NRM activities to improve technical competency of the officials  | 13 | 43.33 | II   |
| 3          | Training programmes should be conducted on skills of motivating and enabling the farmers to participate at various phases of implementation of NRM activities   | 10 | 33.33 | III  |
| <b>IV</b>  | <b>Financial suggestions</b>  |    |       |      |
| 1          | The allotted funds should be released in time to facilitate to implement the NRM activities as per the schedule and to derive the maximum benefit   | 18 | 60.00 | II   |
| 2          | Rewards in terms of appreciation, certificates, monetary benefits etc., should be given to the officials who made extra effort to implement the NRM activities  | 10 | 33.33 | III  |

|           |   |    |       |     |
|-----------|---|----|-------|-----|
| 3         | The financial management procedure in terms of record keeping, cash book maintenance and auditing should be taught to the officials not to commit any financial irregularity in spending the budget                                       | 8  | 26.66 | IV  |
| 4         | The financial power should be decentralized to delegate financial powers partly to the project officers to have leverage in implementing innovative NRM initiatives   | 20 | 66.66 | I   |
| <b>V</b>  | <b>Job related suggestions</b>  |    |       |     |
| 1         | Optimum workload should be given to all the officials by filling the vacant posts and also distributing the work rationally to all the officials  | 23 | 76.66 | I   |
| 2         | Specialized training programmes should be organized to inculcate the skills on programme development and assessment among the officials concerned in implementation of NRM activities   | 20 | 66.66 | II  |
| 3         | The members of watershed user groups should be sensitized to think in a broader perspective to take up NRM activities on a community mode rather than in isolation  | 7  | 23.33 | IV  |
| 4         | An open and transparent communication should be evolved to disseminate and exchange the information among the officials with a much more speed and accuracy   | 15 | 50.00 | III |
| <b>VI</b> | <b>Extension suggestions</b>  |    |       |     |
| 1         | The officials should be trained on a specialized topic on training management involving the aspects of need assessment, conducting the training, curriculum development, usage of A.V aids and follow up action etc                       | 8  | 26.66 | III |
| 2         | The officials concerned with the implementation of NRM activities should be trained on acquiring the skills on planning and preparation of usage of agriculture information material like leaflets, pamphlets, folders, wall posters etc. | 15 | 50.00 | II  |
| 3         | The officials should be enlightened on the importance and usage of various tools and techniques followed to disseminate the latest information on NRM activities  | 22 | 73.33 | I   |

implement the NRM activities as per the schedule and to derive the maximum benefit (60.00%). The job related suggestions are optimum workload should be given to all the officials by filling the vacant posts and also distributing the work rationally to all the officials (76.66%) and specialized training programmes should be organized to inculcate the skills on programme development and assessment among the officials concerned in implementation of NRM activities (66.66%). With regard to the extension category the suggestions expressed are, officials should be

enlightened on the importance and usage of various tools and techniques followed to disseminate the latest information on NRM activities (73.33%) and the officials concerned with the implementation of NRM activities should be trained on acquiring the skills on planning, preparation and usage of agriculture information material like leaflets, pamphlets, folders, wall posters etc. (50.00%).

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